

WHAT IS CLAIMED IS:

1. An apparatus, comprising:
a first inlet, said first inlet adapted to be coupled with a downspout, said downspout
having a downspout inlet and a downspout outlet;
5 a first outlet, said first outlet disposed at a location on said apparatus subsequent to
said first inlet; and
one or more fluid treatment elements adapted to treat fluid passing through said
apparatus, at least one of said one or more fluid treatment elements disposed
at a location between said first inlet and said first outlet.
10
2. The apparatus of claim 1, wherein at least one of said one or more fluid treatment
elements comprises a filter element.
3. The apparatus of claim 2, wherein said filter element comprises a filter cartridge.
15
4. The apparatus of claim 1, wherein said one or more fluid treatment elements
comprises a plurality of filter cartridges.
5. The apparatus of claim 1, wherein said first inlet is coupled with said downspout at a
20 location on said downspout subsequent to said downspout inlet.
6. The apparatus of claim 5, wherein said first outlet is coupled with said downspout at
a location on said downspout prior to said downspout outlet.

7. The apparatus of claim 6, wherein said apparatus is entirely inserted into said downspout at a location between said downspout inlet and said downspout outlet.
- 5 8. The apparatus of claim 7, wherein such insertion involves the cutting of said downspout at the location of insertion.
9. The apparatus of claim 7, wherein such insertion involves the removal of a section of downspout at the location of insertion.
- 10 10. The apparatus of claim 1, further comprising:
an outer housing, said outer housing adapted to contain at least one of said one or more fluid treatment elements.
- 15 11. The apparatus of claim 1, further comprising:
a primary bypass, said primary bypass adapted to provide a first alternative route for fluid to pass through said apparatus.
- 20 12. The apparatus of claim 11, wherein said primary bypass passes fluid through said apparatus via said first alternative route during periods when at least one of said one or more filtration elements are unable to handle the volume of fluid passing through said apparatus.

13. The apparatus of claim 11, further comprising:
a secondary bypass distinct from said primary bypass, said secondary bypass adapted
to provide a second alternative route for fluid to pass through said apparatus.
- 5 14. The apparatus of claim 1, further comprising:
a second outlet, said second outlet adapted to direct fluid away from said downspout.
15. The apparatus of claim 14, wherein at least a portion of fluid passing through said
second outlet is water that has been treated to be of sufficient quality for personal or
10 commercial use.
16. The apparatus of claim 14, wherein at least a portion of fluid passing through said
second outlet is potable water.
- 15 17. The apparatus of claim 1, further comprising:
one or more applications of chitosan disposed at one or more locations about said
apparatus.
18. The apparatus of claim 1, further comprising:
20 a valve, said valve adapted to direct fluid toward said downspout outlet, toward some
other destination, or both.

19. A downspout filter, comprising: ✓
a first inlet, said first inlet adapted to be coupled with a downspout, said downspout
having a downspout inlet and a downspout outlet;
a first outlet, said first outlet disposed at a location on said downspout filter
5 subsequent to said first inlet; and
one or more fluid treatment elements adapted to treat fluid passing through said
downspout filter.
20. The downspout filter of claim 19, wherein said one or more fluid treatment elements
10 comprises a filter element.
21. The downspout filter of claim 20, wherein said filter element comprises a filter
cartridge.
- 15 22. The downspout filter of claim 19, wherein said one or more fluid treatment elements
comprises a plurality of filter cartridges.
23. The downspout filter of claim 19, wherein said first inlet is coupled with said
downspout at a location on said downspout subsequent to said downspout inlet, and
20 wherein said first outlet is coupled with said downspout at a location on said
downspout prior to said downspout outlet.

24. The downspout filter of claim 19, further comprising:
a housing, said housing adapted to contain at least one of said one or more fluid
treatment elements;
a first bypass, said first bypass adapted to provide an alternative route for fluid to
pass through said downspout filter;
a second outlet, said second outlet adapted to direct fluid away from said downspout;
and
a valve, said valve adapted to direct fluid toward said downspout outlet, toward said
second outlet, or both.

10

25. The downspout filter of claim 22, wherein at least a portion of fluid passing through
said second outlet is water of sufficient quality for personal or commercial use.

15

26. The downspout filter of claim 23, wherein at least a portion of water passing through
said second outlet is potable water.

20

27. The downspout filter of claim 19, further comprising:
one or more applications of chitosan disposed at one or more locations about said
downspout filter.

28. The downspout filter of claim 19, further comprising:
a secondary bypass distinct from said primary bypass, said secondary bypass adapted
to provide a second alternative route for fluid to pass through said downspout
filter.

29. An apparatus, comprising:
- a means for receiving fluid from a downspout, said downspout having a downspout inlet and a downspout outlet;
- 5 a means for passing said fluid out of said apparatus; and
- a means for treating said fluid as it passes through said apparatus, said means for treating said fluid being disposed at a location between said downspout inlet and said downspout outlet.
- 10 30. The apparatus of claim 29, wherein said means for passing passes said fluid back into said downspout.
31. The apparatus of claim 29, wherein said fluid treatment means comprises a filter element.
- 15 32. The apparatus of claim 31, wherein said filter element comprises a filter cartridge.
33. The apparatus of claim 29, further comprising:
- a primary means for bypassing said fluid treating means, said primary bypassing
- 20 means adapted to provide a first alternative route for fluid to pass through said apparatus.
34. The apparatus of claim 33, wherein said primary fluid bypassing means passes fluid through said apparatus via said first alternative route during periods when said fluid

treatment means is unable to handle the volume of fluid passing through said apparatus.

35. The apparatus of claim 33, further comprising:

5 a secondary means for bypassing said fluid treatment means, said secondary bypassing means adapted to provide a second alternative route for fluid to pass through said apparatus.

36. The apparatus of claim 29, wherein at least a portion of fluid passing through said
10 downspout outlet is water that has been treated to be sufficient quality for personal or commercial use.

37. The apparatus of claim 29, wherein at least a portion of fluid passing out of said passing means is potable water.

15

38. The apparatus of claim 29, further comprising:

a means for applying chitosan disposed at one or more locations about said apparatus.

20 39. The apparatus of claim 29, further comprising:

a diverting means, said diverting means adapted to direct fluid toward said downspout outlet, toward some other destination, or both.

40. A method of treating water runoff, comprising: ~
diverting storm water from one or more surfaces of an elevated structure to one or
more water collection points;
passing said water from at least one of said one or more water collection points into a
5 water filtration inlet;
filtering at least a portion of said water; and
passing said filtered water through a water filtration outlet.
41. A method for treating fluid, comprising: /
10 selecting a downspout, said downspout having a downspout inlet and a downspout
outlet;
inserting a downspout filter into said downspout, said downspout filter having a first
inlet adapted to be coupled with said downspout, a first outlet disposed at a
location subsequent to said first inlet, and one or more fluid treatment
15 elements adapted to treat fluid passing through said downspout filter; and
permitting fluid to pass through said downspout.
42. The method of claim 41, further comprising the steps of:
directing at least a portion of said fluid from said downspout into said downspout
20 filter; and
passing at least a portion of said fluid through said downspout filter.

43. The method of claim 42, further comprising the step of:
directing at least a portion of said fluid from said downspout filter back into said
downspout after said fluid has passed through said downspout filter.

5 44. The method of claim 42, further comprising the step of:
directing at least a portion of said fluid from said downspout filter toward a second
outlet of said downspout filter after said fluid has passed through said
downspout filter.